UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

DATE: NOV 17 2014

SUBJECT: INSPECTION REPORT – West Bay Exploration Co, Jackson County, Michigan
Facility: Norvell 22 CPF, Norvell Township

FROM: Natalie Topinka, Environmental Scientist
AECAS (IL/IN)

THRU: Nathan Frank, Chief
AECAS (IL/IN)

TO: File

Date of Inspection: August 28, 2014

Attendees: Natalie Topinka, Environmental Scientist, U.S. EPA
Kristy Shimko, Geologist, Office of Oil, Gas and Minerals, MDEQ
Terry R. Pelham, Production Foreman, West Bay Exploration

Purpose of Inspection: The purpose of conducting an inspection of West Bay Exploration Co's Jackson County operations was to assess compliance with the Michigan State Implementation Plan and any applicable air permits.

Company Description and Background:

Location: Approximately 12190 Ladd Rd, Brooklyn, MI 49230
(Lat: 42.104910, Long: -84.184094)

Primary Contact: Terry R. Pelham, Production Foreman

West Bay Exploration Company has headquarters in Traverse City, Michigan, with operations in several states including Michigan, Texas, Oklahoma, and North Dakota. The company employs 20 people and many more contractors and lease operators.

Opening Conference

I arrived at the Norvell 22 facility at 3:45 pm with Ms. Shimko of MDEQ and Mr. Pelham of

West Bay. We had all come directly from inspecting another West Bay facility so introductions were made previously. The following information was obtained verbally from Mr. Pelham during the inspection.

Norvell 22 Facility Overview

Mr. Pelham estimated that the Norvell 22 facility had been constructed in approximately 2011. On-site are 18 400-barrel oil and brine storage tanks, eleven heater treaters, and a flare. The facility receives product from eleven wells. The heater treaters separate the emulsion of oil, gas, and water by applying heat from a gas-fired burner. The components of the emulsion separate into layers according to density and can then be drawn off individually. The tanks are equipped with a vapor recovery unit (VRU), which was in operation at the time of my inspection. The flare pilot flame was also lit. Oil and brine are transported off-site by truck, while gas is sent to a main pipeline. The flare receives vapors from tanks, truck venting during loading, and/or emergency/overload conditions.

Facility Tour

I began my tour at the tank battery. I made note of a petroleum-like odor near the tanks. Upon climbing the stairs to the tops of the tanks, I used the IR camera (a FLIR GF320) to take video clips of leaking tank thief hatches. Three of the thief hatches were leaking via the hatch seals, and one had a small leak through an associated gasket (see IR Camera Video log). I also took a video clip of the flare. The flare was lit throughout the duration of the inspection and no visible emissions (as seen with the naked eye) were noted from the flare. The IR camera video shows a gas plume moving beyond the combustion zone of the flare when viewed in high-sensitivity mode.

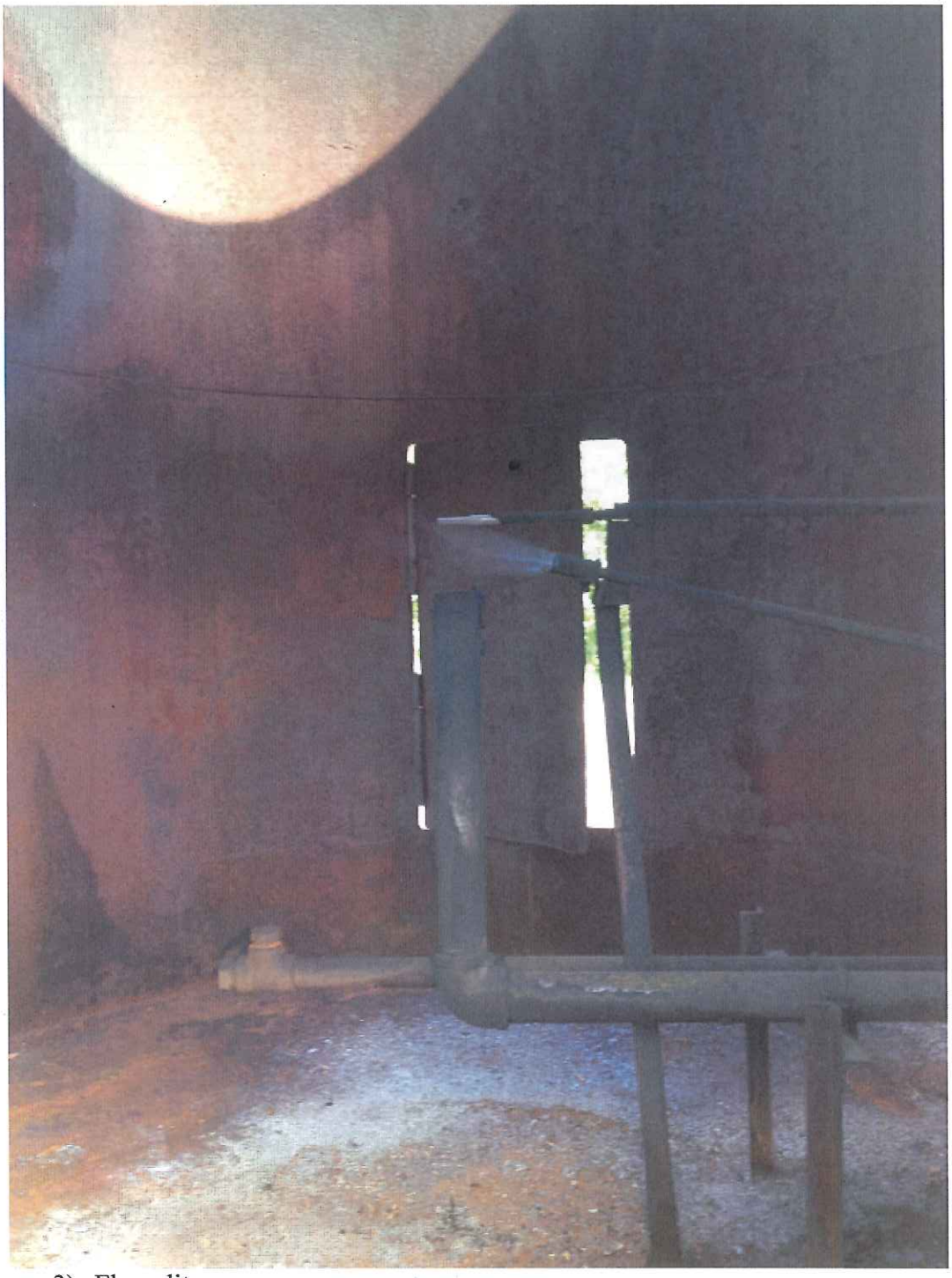
Closing Conference

I shared my observations with Mr. Pelham regarding which tank hatches were leaking. Mr. Pelham did not claim any information as confidential business information. Mr. Pelham, Ms. Shimko, and I agreed to caravan to another West Bay facility nearby. We departed the Norvell 22 facility at approximately 4:15 pm.

Photos

1) Heater treaters with flare in background.

2) Tank battery.



3) Flare, lit.

IR Video Log

Video ID number	Description
MOV_0742.mp4	Leaking thief hatch
MOV_0743.mp4	Leaking thief hatch
MOV_0744.mp4	Leaking gasket at thief hatch
MOV_0745.mp4	Leaking thief hatch
MOV_0746.mp4	Flare

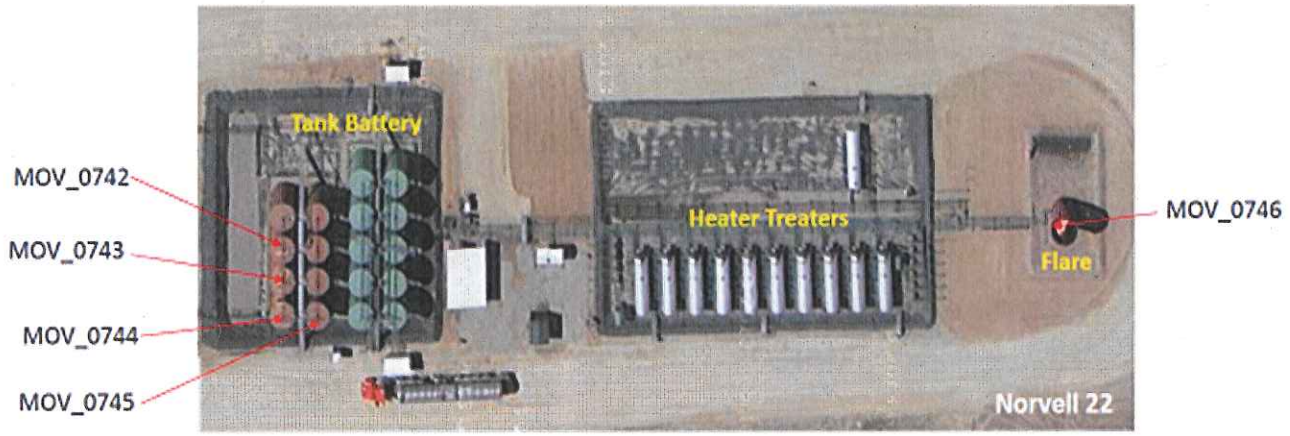


Image: Google Maps